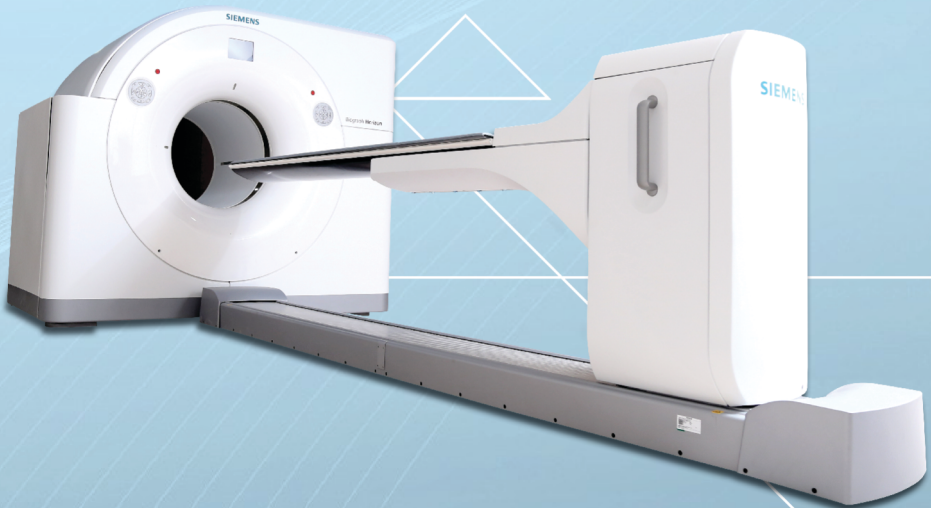


Department of Nuclear Medicine



ZYDUS CANCER CENTRE

Zydus Hospitals Road, S.G. Highway, Thaltej, Ahmedabad - 380 054, Gujarat.

INTRODUCTION OF NUCLEAR MEDICINE

- The Department of Nuclear Medicine at Zydus Cancer Centre offers a comprehensive range of clinical services in diagnostic and therapeutic nuclear medicine. Equipped with the state-of-the-art equipments we are committed to providing high quality clinical services while adhering to the best practices in radiation protection and patient safety.

WHAT IS NUCLEAR MEDICINE?

- Nuclear medicine leverages “radioactive tracers” to obtain diagnostic information.
- Radiation is “emitted” from inside the human body c.f. “transmitted” radiation in x-ray imaging.
- “Radioactive Tracers” trace the paths of various biochemical molecules in our body and hence can obtain functional information about the bodies workings (i.e. physiology).

DIFFERENTIATION FROM CONVENTIONAL IMAGING

Anatomical Imaging (CT, MRI etc.)



Functional Imaging (PET, SPECT etc.)



RADIOPHARMACEUTICALS



Pharmaceutical

Traces physiology / localises in organs of interest



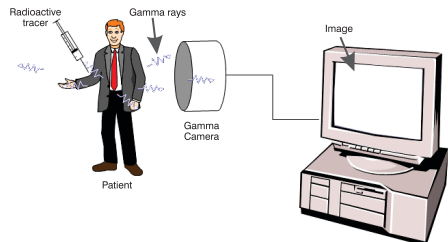
Biochemical Bonding



Radioactive nuclide

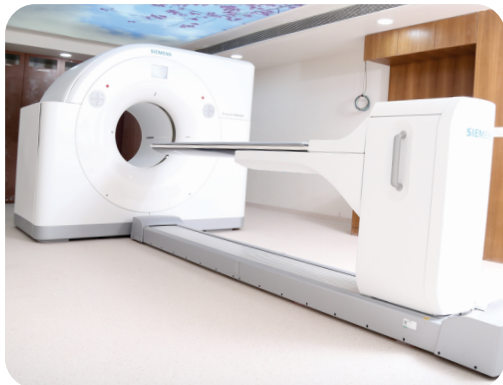
Emits radiation for detection or therapy

DETECTION OF THE RADIOPHARMACEUTICAL



STATE-OF-THE-ART INFRASTRUCTURE

PET-CT Scanner



- First Biograph Horizon with TRUE V in the entire Western India and Gujarat
- First 32 slice PET CT in Gujarat
- First PET CT capable of doing Dynamic Scans in Gujarat
- Capability to scan with good image quality even @ 5mCi dose (due to the LSO based crystals coupled with TOF (Time of Flight) Technology, with reduction in radiation dose to patient
- TRUE V reduces scanning time, thereby adding patient comfort

SPECT Gamma Camera

- First SYMBIA EVO EXCEL of Gujarat
- Unique and exclusive 76 degrees Cardiac Angle - Cardiac Scanning Image Quality of the Highest Order
- Unique Reconstruction Engine to reduce either TIME or DOSE by 50%
- Improve the comfort and satisfaction of large or claustrophobic patients with a 30% larger bore and shorter tunnel length



SPECT FACILITY



HOT LAB



NUCLEAR CARDIOLOGY

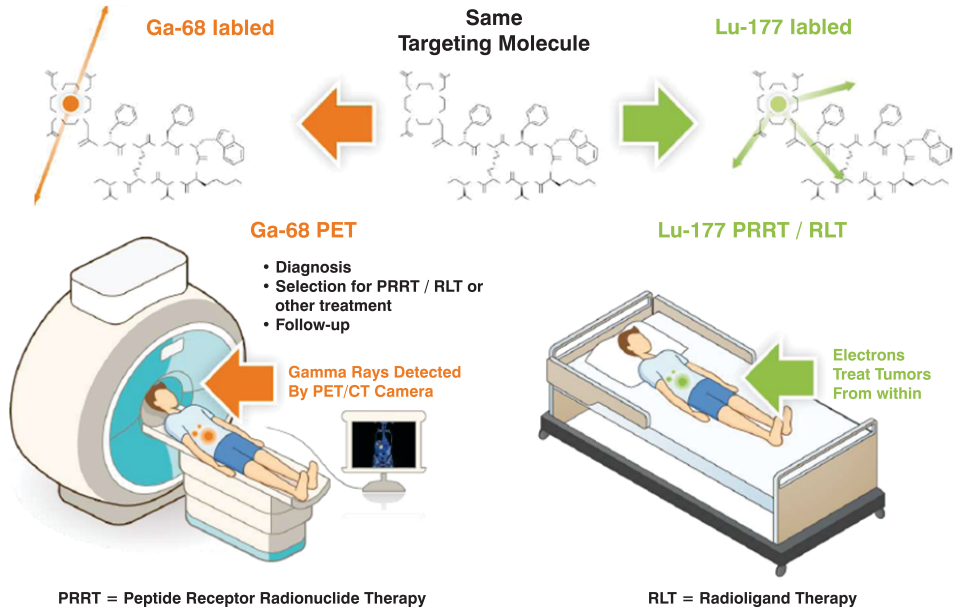
HIGH DOSE RADIONUCLIDE THERAPY FACILITY



THERAPEUTICS :

- High Dose Radioiodine (I-131) Therapy for Cancer Thyroid (Under admission)
- Low Dose Radioiodine (I-131) Therapy for hyperthyroidism (OPD basis)
- I-131 MIBG Therapy
- Radionuclide Therapy for Bone Pain Palliation in multiple skeletal metastases (OPD basis)
- Lu-177 DOTATATE therapy for Neuroendocrine tumours (Under admission)
- Lu-177 PSMA Therapy for Prostate Cancer (Under admission)

NUCLEAR THERANOSTICS, PRECISION AND PERSONALIZED MEDICINE



SCOP OF SERVICES

DIAGNOSTICS - GAMMA CAMERA (SPECT)

GENITOURINARY

- DTPA Renal Scan
- EC/MAG3 Renal Scan
- DMSA Renal Scan
- DRCG/IDRCG
- Testicular Imaging
- Captopril Imaging
- Transplant Renogram

ENDOCRINE

- Thyroid Scan
- Parathyroid Scan

- MIBG Scan
- Whole Body I-131 Scan

BONE SCAN

- Whole Body Bone Scan
- Triple Phase Bone Scan
- Hip & Knee Prosthesis Infection Imaging (bone Scan + 18F-FDG Regional Scan)

RESPIRATORY

- Ventilation Perfusion Scan (VQ Scan)
- Lung Ventilation Scan
- Lung Perfusion Scan

HEPATOBILLIARY

- HIDA Scan
- Blood Pool Scan
- Liver-spleen Scan
- MAA Scan For HPS

GASTROINTESTINAL

- GE REFLUX SCAN
- GI Bleed Scan
- Meckel's Scan
- Solid Meal Gastric Emptying Study

CARDIAC

Myocardial Perfusion Scan (MPI)

- Stress MPI For Inducible Ischaemia (TMT/ adenosine/dobutamine)
- Rest MPI For Myocardial Viability

MUGA STUDY

BRAIN

- Perfusion Scan
- TRODAT Scan

LYMPHOSCINTIGRAPHY

DIAGNOSTICS - PET-CT

A 18F - FDG PET-CT

- Whole Body Scan
 - Tumour Imaging
 - Infection Imaging
- CARDIAC PET For Myocardial Viability (rest MPI+cardiac PET)

iii Brain PET

- Tumour Imaging
- Dementia
- Movement Disorders
- Interictal PET For Epilepsy

B 68 Ga – DOTA – SSTR PET-CT for NET

C 68 Ga – PSMA PET-CT for Ca prostate

THERAPEUTICS

Thyroid

- High Dose Radioiodine (I-131) Therapy for Cancer Thyroid (Under admission)
- Low Dose Radioiodine (I-131) Therapy for Hyperthyroidism (OPD basis)

I-131 MIBG Therapy

Radionuclide Therapy for Bone Pain Palliation in Multiple Skeletal Metastases (OPD basis)

Neuroendocrine Tumors

- Lu-177 DOTATATE therapy for Neuroendocrine tumours (Under admission)

Prostate Cancer

- Lu-177 PSMA Therapy for Prostate Cancer (Under Admission)



DR. SUNNY GANDHI

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FEBNM (Europe), FANMB (Asia),

Consultant Nuclear Medicine,

Zydus Hospital, Ahmedabad.

M: +91-7698482148

Email: - gndsunny@gmail.com

- Worked as a Consultant and Head, Department of Nuclear Medicine & PET-CT, Infocus Diagnostics, Ahmedabad, Gujarat for 5.5 years.
- Handled Nuclear Medicine Department (Dual Head Gamma Camera & PET-CT) in full fledged radiology diagnostic set up.
- ~ 9000 PET-CT scans reported
- Fellow of European Board of Nuclear Medicine
- Fellow of Asian Nuclear Medicine Board
- Life time member of Society of Nuclear Medicine (SNM), India and Association of Nuclear Medicine physician of India (ANMPI)
- Total 10 publications in national and international journals
- Total 10 poster/oral presentations in national and international journals
- Reviewed 1 paper as guest reviewer
- Attended various national and international conferences
- Few guest lectures and panel discussions in various local CMEs

Scope of Services

Medical Oncology & Haematology

- Chemotherapy
- Immunotherapy
- Bone Marrow Transplant
- Paediatric Oncology
- Geriatric Oncology
- Onco Critical Care

Surgical Oncology

- Head & Neck
- Breast
- GI, Lung & Thoracic
- Cervical and Gynaecology
- Prostate and Genito-urinary
- Colorectal
- Peritoneal
- Brain, Spine and Bone
- Liver & Pancreas

Plastic and Reconstructive Surgeries

Radiation Oncology

- Radiation Therapy

Nuclear Medicine

- PET CT
- SPECT
- High Dose Radionuclide Therapy

Pain and Palliative Care

Anaesthesiology

Dr. Rajendra Bagwade
Dr Dharmendrasinh Chavda

Medical Oncology & Haematology

Medical Oncology & Haematology

Dr. Pankaj Shah
Dr. Dileep Srinivasan
Dr. Mithun Shah
Dr. Nahush Tahiliani

Haematology & Bone Marrow Transplant

Dr. Nidhi Jain

Onco Critical Care

Dr. Mrugank Bhavsar

Surgical Oncology

Head & Neck

Dr. Mahesh H Patel
Dr. Siddharth Shah

GI, Lung & Thoracic

Dr. Mahesh D Patel

GI, Peritoneal, Gynaecology

Dr. Aditi Bhatt

Breast Cancer

Dr. Priyanka Chiripal

Uro Oncology

Dr. Mukesh Patel
Dr. Kamlesh Patel
Dr. Kaustubh Patel

Neuro Oncology

Dr. Dipak Patel
Dr. Kalpesh Shah

Spine Cancer

Dr. Hitesh Modi

Plastic & Reconstructive surgery

Dr. Raghuvir Solanki
Dr. Jatinkumar Bhojani

Radiation Oncology

Dr. Sandeep Jain

Nuclear Medicine

Dr. Sunny Gandhi

Pain Management

Dr. Milan Mehta



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